

REMARKS

I. Status Summary

Claims 1-9 are pending in the present application. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the arguments set forth hereinbelow is respectfully requested.

II. Specification

The Examiner stated that the present application does not include an abstract of the disclosure as required by 37 C.F.R. § 1.72(b). (Official Action, page 2.) Applicants have amended the specification to add an abstract. In view of the addition of the abstract to the specification, applicant respectfully submits that the specification is now in proper form.

III. Claim Rejections Under 35 U.S.C. § 102

The Examiner has rejected Claims 1-9 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,058,047 to Chung (hereinafter, "Chung"). This rejection is respectfully traversed.

Claim 1 recites a codec circuit having a programmable digital bandpass filter for matching the filter characteristics of the codec circuit to a transmitted PCM signal. Further, Claim 1 recites that the bandpass filter matches the filter characteristics of the codec circuit to a transmitted PCM signal. Claim 1 also recites that the bandpass filter includes at least one programmable digital high-pass filter at least one programmable digital low-pass filter. The high-pass and low-pass filters are connected in series.

Figure 2 illustrates a block diagram of an exemplary programmable digital bandpass filter **6** including a programmable digital high-pass filter **29** connected in series with a programmable digital low-pass filter **30**. (Present Application page 8, line 32, to page 9, line 3.) Claim 1 further recites that the setting filter coefficients of the high-pass and low-pass filters can each be set by means of a signal identification device for identification of a PCM signal transmitted through the codec circuit and as a function of the transmitted PCM signal in order to vary a bandpass filter characteristic for the programmable digital bandpass filter. Referring again to the exemplary bandpass filter of Figure 2, setting filter coefficients of high-pass filter **29** and low-pass filter **30** can be stored in memory devices **32** and **33**, respectively. (Present Application page 8, lines 3-9.) The setting filter coefficients stored in memory devices **32** and **33** can be reprogrammed by a signal identification device **24**. (Present Application page 8, lines 9-11.)

Chung is directed to signal processing circuitry for performing codec and filter functions. In particular, the signal processing circuitry converts an analog voice signal into digital PCM samples for placing the PCM samples onto a PCM highway. (Chung, column 4, lines 9-16.) Further, the signal processing circuitry converts digital PCM samples received from the PCM highway into an analog signal. (Chung, column 4, lines 16-18.) A transmit signal processing path includes a first programmable digital filter (X) **30** and a high-pass filter **32**. (Chung, column 4, lines 34-38.) Receive signal processing circuitry includes a low-pass filter **42** and a second programmable digital filter (R) **44**. (Chung, column 4, lines 52-56.) Programmable filters **30** and **44** can include coefficients stored in a memory. (Chung, column 5, lines 14-17.) The

coefficients of programmable filters **30** and **44** are generated by a system **60**. (Chung, column 5, lines 22-29.) System **60** has a desired filter characteristic processor **62** and an adaptive coefficient processor **64**. (Chung, column 5, lines 27-29.) Filter characteristic processor **62** provides a desired filter characteristic in response to a line impedance, desired terminating impedance, and actual terminating impedance. (Chung, column 5, lines 42-50.)

The Examiner contends that high-pass filter **32** and low-pass filter **42** of Chung corresponds to the digital high-pass filter and the digital low-pass filter, respectively, recited by Claim 1. As previously stated, Claim 1 requires a series connection between the digital high-pass filter and the digital low-pass filter. Referring to Figure 1 of Chung, high-pass filter **32** and low-pass filter **42** are not connected in series. High-pass filter **32** is utilized in a transmit signal processing path. In contrast, low-pass filter **42** is utilized in receive signal processing circuitry. For these reasons, applicant believes that high-pass filter **32** and low-pass filter **42** cannot be considered to be connected in series. Therefore, Chung fails to disclose the series connection of the digital high-pass filter and the digital low-pass filter, as required by Claim 1.

Further, Claim 1 requires that the digital high-pass filter and the digital low-pass filter are utilized in a transmission path. As previously stated, Chung discloses that low-pass filter **42** is utilized in receive signal processing circuitry. Accordingly, it is believed that Chung fails to disclose a digital low-pass filter in a transmission path as required by Claim 1.

The Examiner contends that Chung discloses a signal identification device as recited by Claim 1. Claim 1 recites that the coefficients are set by the signal

identification device. Further, Claim 1 recites that the coefficients are set as a function of a PCM signal. Referring to column 5, lines 27-50, of Chung, system 60 includes desired filter characteristic processor 62 for generating coefficients of programmable filters 30 and 44. Desired filter characteristics are provided in response to a line impedance, desired terminating impedance, and actual terminating impedance. (Chung, column 5, lines 42-50.) However, there is no disclosure of setting coefficients are set as a function of a PCM signal as required by Claim 1. Therefore, it is believed that Chung fails to disclose a signal identification device as required by Claim 1.

Applicant respectfully submits that, in view of the above remarks, Chung does not disclose each and every element recited by Claim 1. Accordingly, applicant respectfully requests that the rejection of Claims 1 under 35 U.S.C. §102(b) be withdrawn and the claim allowed at this time.

Claims 2-9 depend from Claim 1. Therefore, the comments presented above relating to Claim 1 apply equally to Claims 2-9. Accordingly, applicant respectfully submits that Claims 2-9 should be allowed and the rejections withdrawn for the same reasons provided above for Claim 1.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully

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requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

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DEPOSIT ACCOUNT

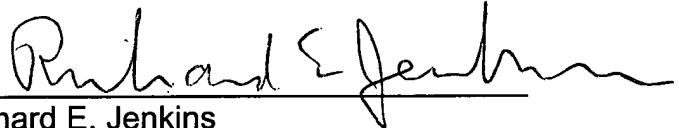
The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

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